

Amendment to the Abstract:

Please delete the present Abstract and substitute the following:

ABSTRACT

A domain manager of a router uses a mapping array that includes pointers to associate interfaces of the router with routing tables. The domain manager executes a single IP stack to receive packets from a plurality of address domains through the interfaces, and identify routing tables according to the mapping array. The mapping array associates interfaces connecting to the same address domain with the same routing table. Information in each of the routing tables is updated independently of other routing tables.